

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system for transmitting a modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

a power amplifier for amplifying the radio signal in a transmission period;
a controller for generating a switching control signal in a non-transmission period; and
a switch for switching the amplified radio signal from the power amplifier between a first and a second antenna in response to the switching control signal,

wherein the transmission period and the non-transmission period comprise a sub-frame,

wherein the non-transmission period is a guard period in each sub-frame for separating the sub-frames, and
~~a guard period in each time slot for dividing among the time slots of a frame associated with the radio signal, a guard period in each sub-frame for dividing among the sub-frames associated with the frame, or a guard period for dividing between uplink time slot and downlink time slot in the sub-frame~~

wherein the guard period is located at the end of each sub-frame.

2. (Previously Presented) The transmission apparatus as claimed in claim 1, wherein the controller generates the switching control signal in a guard period of the last time slot among the time slots of the frame.

3. (Original) The transmission apparatus as claimed in claim 2, wherein the guard period has a length of 96 chips.

4. (Original) The transmission apparatus as claimed in claim 2, wherein the controller disables the power amplifier at a start point of the guard period and then outputs the switching control signal when an output level of the power amplifier is lowered to a predetermined level.

5. (Currently Amended) A transmission method in a CDMA (Code Division Multiple Access) mobile communication system for transmitting ~~a the~~ modulated radio signal using a plurality of antennas, the transmission method comprising the steps of:

amplifying the radio signal in a transmission period;
generating a switching control signal in a non-transmission period ; and
switching the amplified radio signal between a first and a second antenna in response to the switching control signal,

wherein the transmission period and the non-transmission period comprise a sub-frame,
wherein the non-transmission period is a guard period in each sub-frame for separating the sub-frames, and a guard period in each time slot for dividing among the time slots of a frame associated with the radio signal, a guard period in each sub-frame for dividing among the sub-frames associated with the frame and constituting the last time slot of the sub-frame, or a guard period for dividing between uplink time slot and downlink time slot in the sub-frame
wherein the guard period is located at the end of each sub-frame.

6. (Previously Presented) The transmission method as claimed in claim 5, wherein the switching control signal is generated in a guard period of the last time slot among the time slots of the frame.

7. (Original) The transmission method as claimed in claim 6, wherein the guard period has a length of 96 chips.

8. (Currently Amended) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system for transmitting ~~a the~~ modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

a power amplifier for amplifying the radio signal in a transmission period;
a controller for generating a switching control signal in a non-transmission period; and
a switch for switching the amplified radio signal by the power amplifier between a first and a second antenna in response to the switching control signal,

wherein the transmission period and the non-transmission period comprise a sub-frame,
wherein the non-transmission period is a ~~first~~ guard period in each sub-frame for
separating the sub-frames, and dividing among the sub-frames associated with the frame, or a
~~second guard period for dividing between uplink time slot and downlink time slot in the sub-~~
~~frame~~
wherein the guard period is located at the end of each sub-frame.

9 - 10. (Cancelled)

11. (Currently Amended) The transmission apparatus as claimed in claim 10~~8~~, wherein
the ~~first~~ guard period has a length of 96 chips.

12. (Currently Amended) The transmission apparatus as claimed in claim 8, wherein the
~~second~~ guard period is a downlink non-transmission period of the sub-frame.

13. (Cancelled)

14. (Previously Presented) The transmission apparatus as claimed in claim 12, wherein
the downlink non-transmission period is 875 μ sec.

15. (Currently Amended) The transmission apparatus as claimed in claim 8, wherein the
~~second~~ guard period is an uplink non-transmission period of the sub-frame.

16. (Cancelled)

17. (Previously Presented) The transmission apparatus as claimed in claim 15, wherein
the uplink non-transmission period is 825 μ sec.

18. (Currently Amended) A transmission method in a CDMA (Code Division Multiple Access) mobile communication system for transmitting ~~a~~ the modulated radio signal using a plurality of antennas, the transmission method comprising the steps of:

amplifying the radio signal in a transmission period;
generating a switching control signal in a non-transmission period; and
switching the amplified radio signal between a first and a second antenna in response to the switching control signal,

wherein the transmission period and the non-transmission period comprise a sub-frame,
wherein the non-transmission period is a ~~first~~ guard period in each sub-frame for ~~separating the sub-frames, and dividing among the sub-frames associated with the frame, or a~~
~~second guard period for dividing between uplink time slot and downlink time slot in the sub-frame~~

wherein the guard period is located at the end of each sub-frame.

19 - 20. (Cancelled)

21. (Currently Amended) The transmission method as claimed in claim ~~20~~18, wherein the ~~first~~ guard period has a length of 16 chips.

22. (Currently Amended) The transmission method as claimed in claim 18, wherein the ~~second~~ guard period is a downlink non-transmission period of the sub-frame.

23. (Cancelled)

24. (Previously Presented) The transmission method as claimed in claim 22, wherein the downlink non-transmission period is 875μsec.

25. (Currently Amended) The transmission method as claimed in claim 18, wherein the ~~second~~ guard period is an uplink non-transmission period of the sub-frame.

26. (Cancelled)

27. (Previously Presented) The transmission method as claimed in claim 25, wherein the uplink non-transmission period is 825 μ sec.

28-37 (Cancelled)